

AMENDMENTS TO THE CLAIMS

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (canceled)
9. (canceled)
10. (canceled)
11. (canceled)
12. (original) An x-ray mask tool, comprising:

a silicon substrate having a thickness, a top surface, and a bottom surfaces substantially parallel to said top surface, said silicon substrate comprising one or more open cavities etched into said top surface and extending into said substrate thickness, each of said one or more open cavities having one or more surfaces wherein some of said surfaces are non-prismatic surfaces, said surfaces extending to different depths into said substrate thickness, said open cavities filled with a metal deposit to provide a plurality of metal structures embedded into said silicon substrate.

13. (original) The x-ray mask tool of claim 12, wherein said open cavities are trench-like or hole-like or both.
14. (original) The x-ray mask tool of claim 13, wherein said open cavities have cross

sections that are rectangular, triangular, trapezoidal, or parabolic or hyperbolic.

**15. (original)** The x-ray mask tool of claim **12**, wherein some of said non-prismatic surfaces are curvilinear.

**16. (original)** The x-ray mask tool of claim **12**, wherein some of said surfaces intersect to form an edge or a corner.

**17. (original)** The x-ray mask tool of claim **12**, wherein said metal deposit is a metal selected from the group consisting of the Transition series of metals listed in New IUPAC Group Numbers 4 – 12 of the Period Table of elements, aluminum, tin, and alloys thereof.

**18. (original)** The x-ray mask tool of claim **12**, wherein said metal deposit consists essentially of gold.

**19. (original)** The x-ray mask tool of claim **17**, wherein said metal deposit comprises a thin vapor deposited first metal layer.

**20. (original)** The x-ray mask tool of claim **19**, wherein said vapor deposited first metal layer comprises a first layer of chromium.

**21. (original)** The x-ray mask tool of claim **19**, wherein said metal deposit is deposited by electroplating.

**22. (original)** The x-ray mask tool of claim **19**, wherein said metal deposit is deposited by electroless deposition.

**23. (original)** The x-ray mask tool of claim **19**, wherein said metal deposit is deposited by thermal or particle vapor deposition, or by sputter deposition.

**24. (canceled)**

**25. (canceled)**

**26. (canceled)**

**27. (canceled)**

**28. (canceled)**

**29. (canceled)**

**30. (canceled)**

**31. (canceled)**

**32. (canceled)**

**33. (canceled)**